

CITY OF SURPRISE
JERRY STREET RETENTION BASIN

PROJECT # 21527
16001 N JERRY STREET

SURPRISE, ARIZONA



BENCHMARK

CITY OF SURPRISE BRASS CAP FLUSH AT THE
INTERSECTION OF PARADISE LANE AND EL
MIRAGE ROAD.
STAMPED: "BM 31-15"

COORDINATES (NAD 83):
33°37'50.80500" N
112°19'29.22963" W

NAVD88 ELEV = 1160.638

BASIS OF BEARING

MARICOPA COUNTY LOW DISTORTION PROJECTION
LINEAR UNIT: INTERNATIONAL FOOT
GEODETIC DATUM: NAD 1983
PROJECTION TYPE: LAMBERT CONFORMAL CONIC
(SINGLE PARALLEL)

LATITUDE OF ORIGIN: 33°15'00"N
CENTRAL MERIDIAN: 112°15'00"W
FALSE NORTHING: 1,500,000.000 IF
FALSE EASTING: 2,500,000.000 IF
STANDARD PARALLEL SCALE: 1.000045 (EXACT)

ENGINEER

STRAND ASSOCIATES, INC.
4602 E. ELWOOD STREET, STE. 16
PHOENIX, AZ 85034
(602) 437-3733
JIMMY TONTHAT, P.E.

GEOTECH

NINYO AND MOORE
3203 EAST HARBOR DRIVE
PHOENIX, AZ 85034
(602) 243-1600
ELALIM A. AHMED, P.E.

FEMA FLOOD ZONE DESIGNATION

FIRM PANEL 1240L - ZONE X: AREAS OF 0.2
PERCENT ANNUAL CHANCE FLOOD; AREAS OF 1
PERCENT ANNUAL CHANCE FLOOD WITH
AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH
DRAINAGE AREAS LESS THAN 1 SQUARE MILE;
AND AREAS PROTECTED BY LEVEES FROM 1
PERCENT ANNUAL CHANCE FLOOD

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APPROVAL

CITY OF SURPRISE

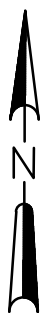
THIS SET OF PLANS HAS BEEN REVIEWED FOR COMPLIANCE WITH CITY
REQUIREMENTS PRIOR TO ISSUANCE OF PERMITS. THE CITY NEITHER ACCEPTS
NOR ASSUMES ANY LIABILITY FOR ERRORS OR OMISSIONS. THIS COMPLIANCE
APPROVAL SHALL NOT PREVENT THE CITY ENGINEER FROM REQUIRING
CORRECTIONS TO ERRORS OR OMISSIONS IN PLANS FOUND TO BE IN VIOLATION OF
LAW OR ORDINANCE.

APPROVED
CITY OF SURPRISE ENGINEER

DATE



VICINITY MAP
NO SCALE



ENGINEERS ESTIMATED QUANTITIES

ENGINEERS ESTIMATED QUANTITIES ARE APPROXIMATED AND NOT TO BE USED FOR BIDDING PURPOSES.
CONTRACTOR IS TO MAKE THEIR OWN DETERMINATION OF QUANTITIES.

ESTIMATED QUANTITIES		
DESCRIPTION	UNIT	QUANTITY
SOIL REMOVAL	CU.YD.	2,200
TREE REMOVAL	EACH	3
REMOVE EXISTING FENCE ON NORTH AND EAST SIDES OF PROPERTY	L.FT	376
REMOVE INACTIVE 4" SEWER LATERAL LOCATED IN SW CORNER OF LOT	EACH	1
MAXWELL PLUS DRYWELL PER MANUFACTURER SPECIFICATIONS.	EACH	2
MAINTENANCE OF EXISTING DRYWELL	EACH	1
SPLIT FACE MASONRY WALL	L.FT.	730
INSTALL DRAINAGE OPENINGS	EACH	3
CONCRETE SPILLWAY	SQ.FT	800
FLARE PHASE 1 SPILLWAY	SQ.FT	4
RIP RAP: D50 = 8" - 1' DEPTH, WITH FILTER FABRIC	CU.YD.	16
INTALL BASE AGGREGATE - 6" DEPTH - BELOW NORTH WALL FOOTING	TON	27
3/4" SCREENED MADISON GOLD DECOMPOSED GRANITE	CU.YD.	151
16' DOUBLE DOOR SWING GATE	EACH	1
PAINT SAFETY RAILING - MATCHING WALL COLOR SELECTION	L.FT	28
PRIVATE PROPERTY SIGN - INSTALL ON GATE	EACH	1

UTILITY COMPANIES			
AGENCY	UTILITY	CONTACT	PHONE
ARIZONA PUBLIC SERVICE	ELECTRIC	RON GANDARA	(602) 371-7546
CITY OF EL MIRAGE	WATER	CHRIS HAUSER	(602) 291-6894
CITY OF SURPRISE	SEWER	SUNEEL GARG	(623) 222-6130
CENTURY LINK	CATV, FIBER	ANDRA HATCHER	(602) 630-5474
COX COMMUNICATIONS	COAXIAL, FIBER	RYAN QUAGLIATA	(623) 328-4058

MAYOR

SHARON WOLCOTT

VICE MAYOR

JOHN WILLIAMS

COUNCIL MEMBER

ROLAND F. WINTERS JR

JIM BIUNDO

JOHN WILLIAMS

RACHEL VILLANNUEVA

SKIP HALL

TODD TANDE

CITY MANAGER

BOB WINGENROTH

CITY CLERK

SHERRY ANN AGUILAR

CITY ENGINEER

KARL ZOOK, P.E.

PROJECT MANAGER

SUNEEL GARG, P.E.

AS-BUILT CERTIFICATION

"I HEREBY CERTIFY THAT THE "AS-BUILT" MEASUREMENTS AS SHOWN HEREON
WERE MADE UNDER MY SUPERVISION OR AS NOTED AND ARE CORRECT TO THE
BEST OF MY KNOWLEDGE AND BELIEF."

REGISTERED PROFESSIONAL ENGINEER

DATE



DATE:	11/17/15	1/26/16							
	90% OWNER REVIEW	2ND CIVIL REVIEW							
NO.									

16001 N JERRY STREET DRAINAGE IMPROVEMENTS

CITY OF SURPRISE
SURPRISE, ARIZONA

JOB NO.

3484.005

PROJECT MGR.

DANIEL RICHARDS



SHEET

1

1 OF 6

GENERAL ENGINEERING NOTES (City of Surprise)

1. ALL CONSTRUCTION MUST CONFORM TO MARICOPA ASSOCIATION OF GOVERNMENT (MAG) SPECIFICATIONS AND DETAILS AND LATEST REVISIONS UNLESS STATED ON PLANS
2. THE ENGINEER WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES OR FOR SAFETY PRECAUTIONS OR PROGRAMS UTILIZED IN CONNECTION WITH THE WORK, AND THEY WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS
3. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING ALL OVERHEAD AND UNDERGROUND UTILITY LOCATIONS WHERE CONSTRUCTION OCCURS. SPECIAL CARE SHALL BE TAKEN TO ENSURE THAT ALL UTILITIES ARE AVOIDED. UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND NOT FOR CONSTRUCTION PURPOSES. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AND OR REPLACED AT THE CONTRACTORS EXPENSE. THE CONTRACTOR SHALL COMPLY WITH ALL CURRENT BLUE STAKE LAWS. CALL BLUE STAKE FOR FIELD LOCATION AT (602) 263-1100.
4. THE CITY OF SURPRISE ENGINEERING SERVICES OF PUBLIC WORKS SHALL BE NOTIFIED FORTY-EIGHT (48) HOURS PRIOR TO COMMENCEMENT OR ANY CONSTRUCTION WORK AT (623) 222-6150.
5. THE ENGINEER AND APPLICABLE AGENCY MUST APPROVE, PRIOR TO CONSTRUCTION, ANY ALTERATION OR VARIANCE FROM THESE PLANS. ANY VARIATION FROM THESE PLANS SHALL BE PROPOSED AND RESUBMITTED FOR REVIEW AND APPROVAL.
6. THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING UTILITIES ON THE SITE. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN OR NOT ON THE DRAWING, SHALL BE REPAIRED/REPLACED AT THE CONTRACTOR'S EXPENSE. EXISTING SURFACE FEATURES AND FENCING SHALL BE REPLACED IN KIND.
7. ANY INSPECTION BY THE CITY, COUNTY, OR THE ENGINEER, SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM THE WORK IN STRICT COMPLIANCE WITH THE APPLICABLE CODES AND AGENCY REQUIREMENTS.
8. THE CONTRACTOR IS TO LOCATE ALL EXISTING LANDSCAPING, LANDSCAPING IRRIGATION LINES, PROPERTY MONUMENTS, FENCING OR SURFACE FEATURES PRIOR TO CONSTRUCTION. ANYTHING DISTURBED DURING CONSTRUCTION SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
9. NOTHING CONTAINED IN THE CONTRACT DOCUMENTS SHALL CREATE, NOT SHALL BE CONSTRUED TO CREATE, ANY CONTRACTUAL RELATIONSHIP BETWEEN THE ENGINEER AND THE CONTRACTOR OR ANY SUBCONTRACTOR.
10. ALL CONSTRUCTION WATER USED WITHIN THE CITY OF SURPRISE WATER SERVICES AREA REQUIRES APPROVAL BY THE CITY OF SURPRISE PUBLIC WORKS DEPARTMENT AND MAY BE SUBJECT TO VOLUME AND TIME RESTRICTIONS. PLEASE SEE THE CITY OF SURPRISE CONSTRUCTION WATER GUIDELINES FOR ADDITIONAL INFORMATION. THE GUIDELINES CAN BE OBTAINED FROM THE PUBLIC WORKS DEPARTMENT AT (623) 222-7000.
11. TRAFFIC CONTROL SHALL BE MAINTAINED IN ACCORDANCE WITH MAG SPECIFICATION 401, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AND THE "TEMPORARY WORK ZONE TRAFFIC MANAGEMENT POLICY" (LATEST EDITION).
12. PRIOR TO FINAL APPROVAL AND ACCEPTANCE OF THE WORK, THE DEVELOPER/CONTRACTOR WILL BE REQUIRED TO CLEAN AND REPAIR ADJACENT (OFF-PROJECT) ROADWAYS USED OR DAMAGED DURING THE COURSE OF CONSTRUCTION.
13. EMERGENCY VEHICLE ACCESS (E.V.A) MUST BE PROVIDED BY THE DEVELOPER/CONTRACTOR THGOUTHOUT THE PROJECT SITE. E.V.A. ROADS AND SIGNAGE SHALL BE MAINTAINED BY THE DEVELOPER/CONTRACTOR AT ALL TIMES. SIGNAGE SHALL BE POSTED AT THE POINT OF ENTRY TO THE SITE AND AT ALL LOCATIONS WHERE A CHANGE IN DIRECTION OCCURS.
14. THE PLANS SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT'S ACCESSIBILITY GUIDELINES, AS PUBLISHED IN THE FEDERAL REGISTER ON SEPTEMBER 15, 2010.

LEGEND





ABC	AGGREGATE BASE COURSE
BOT	BOTTOM OF RETENTION BASIN
BW	BACK OF SIDEWALK
CF	CUBIC FEET
CMU	CONCRETE MASONRY UNIT
COS	CITY OF SURPRISE
COP	CITY OF PHOENIX
COEM	CITY OF EL MIRAGE
DTL	DETAIL
DW	DRIVEWAY
EL	ELEVATION
EOP	EDGE OF PAVEMENT
FG	FINISHED GRADE
GUT	GUTTER
HWEL	HIGH WATER ELEVATION
IRR	IRRIGATION
NG	NATURAL GROUND
NTS	NOT TO SCALE
FL	FLOW LINE
RW	RIGHT OF WAY
SW	SIDEWALK
SSMH	SANITARY SEWER MANHOLE
STD	STANDARD
TBC	TOP BACK OF CURB
TOP	TOP OF RETENTION BASIN
TR60	TYPICAL
VP	VOLUME REQUIRED FOR 50-YEAR, 2-HOUR EVENT
V	VOLUME PROVIDED
WM	WATER METER
WSEL	WATER SURFACE ELEVATION
WV	WATER VALVE

GENERAL GRADING NOTES (City of Surprise)

1. CONTRACTOR TO FOLLOW RECOMMENDATIONS LISTED IN THE PROJECT SPECIFIC GEOTECHNICAL REPORT. SHOULD ANY CONFLICTS ARISE BETWEEN THE SOILS INVESTIGATION REPORT AND THESE GRADING PLANS, THE CIVIL ENGINEER SHALL BE CONTACTED FOR CLARIFICATION.
2. THE ENGINEER MAKES NO REPRESENTATION OR GUARANTEE REGARDING EARTHWORK QUANTITIES OR THAT THE EARTHWORK FOR THIS PROJECT WILL BALANCE DUE TO UNFORESEEN FIELD CONDITIONS.
3. THE ENGINEER WILL PERFORM FIELD SURVEYS FOR PAD ELEVATION CERTIFICATIONS, UPON NOTIFICATION BY THE GRADING CONTRACTOR, THAT THE PADS ARE COMPLETE AND READY FOR CERTIFICATION. IT IS UNDERSTOOD THAT THE CERTIFICATION PROVIDES ONLY A REPRESENTATIVE ELEVATION OF THE AVERAGE GRADE OF EACH LOT, BUILDINGS, OR UNIT PAD, AND SHALL NOT BE CONSTRUED TO INCLUDE YARD AND STREET SUBGRADE CERTIFICATION OR CERTIFICATION THAT THE ENTIRE PAD IS LEVEL, THAT IT WAS CONSTRUCTED IN THE DESIGNED LOCATION OR WAS GRADED TO THE CROSS-SECTION SET FORTH ON THE PLANS OR AS DESIGNATED IN THE SOILS REPORT.
4. AN APPROVED GRADING AND DRAINAGE PLAN MUST BE ON THE JOB SITE AT ALL TIMES. DEVIATION FROM THIS PLAN MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
5. ALL DRAINAGE FACILITIES SUCH AS SWALES, INTERCEPT DITCHES, PIPES, PROTECTIVE BERMS, BARRIER WALLS, CONCRETE CHANNELS, OR OTHER MEASURES DESIGNED TO PROTECT BUILDINGS FROM STORM RUNOFF MUST BE CONSTRUCTED PRIOR TO CONSTRUCTION OF ANY BUILDINGS.
6. A GRADING PERMIT IS REQUIRED. BEFORE A GRADING PERMIT IS ISSUED BY THE CITY OF SURPRISE ENGINEERING SERVICES, THE CONTRACTOR MUST FIRST OBTAIN A DUST CONTROL PERMIT FROM MARICOPA ENVIRONMENTAL SERVICES-AIR QUALITY DIVISION.
7. HAUL PERMITS, WHEN REQUIRED, MUST BE OBTAINED PRIOR TO OR CONCURRENTLY WITH THE GRADING AND GRAINAGE REPORT.
8. A SEPERATE PERMIT IS NECESSARY FOR ANY OFFSITE CONSTRUCTION.
9. CONTRACTOR SHALL PROVIDE LEVEL BOTTOM IN ALL RETENTION BASINS AT ELEVATIONS AS SHOWN ON THE PLANS. SIDE SLOPES IN ALL RETENTION BASINS SHALL NOT EXCEED 4:1 UNLESS NOTED OTHERWISE ON THE PLANS.
10. DRYWELLS, WHEN REQUIRED, MUST BE DRILLED A MINIMUM OF TEN (10) FEET INTO PERMEABLE POROUS STRATA OR PERCOLATION TESTS WILL BE REQUIRED. THE CIVIL INSPECTOR MUST BE PRESENT BEFORE BACKFILL OR WELL PIPES ARE PLACED WITHIN ANY DRYWELLS.
11. THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR REGISTERING THE DRYWELLS SHOWN ON THE PLAN WITH THE ARIZONA DEPARTMENT OF ENVIRONMENTAL GAULITY (ADEQ).
12. ACCESS BARRIERS/TRASH RACKS ARE REQUIRED ON THE EXPOSED ENDS OF ALL STORM DRAINS EIGHTEEN (18) INCHES IN DIAMETER AND GREATER. SEE DETAILS 5-06A, 5-06B, AND 5-06C. REFER TO MAG DETAILS 502-1 AND 502-2 FOR PIPES LESS THAN THIRTY (30) INCHES IN DIAMETER.
13. SOIL COMPACTION TEST RESULTS MUST BE SUBMITTED TO THE CITY OF SURPRISE ENGINEERING SERVICES FOR BUILDING PADS THAT HAVE ONE (1) FOOT OR MORE OF FILL MATERIAL INDICATED.
14. A PAD CERTIFICATION LETTER FOR EACH PAHSE OR PARCEL MUST BE SUBMITTED TO THE CITY OF SURPRISE ENGINEERING SERVICES BY THE DEVELOPER STATING THAT EACH PAD HAS BEEN BUILT IN ACCORDANCE WITH THE SOILS INVESTIGATIVE REPORT AND CITY OF SURPRISE REQUIREMENTS.
15. APPROVAL OF THESE PLANS SHALL NOT PREVENT THE CITY FROM REQUIRING THE CORRECTION OF ERRORS IN THE PLANS WHERE SUCH ERRORS ARE SUBSEQUENTLY FOUND TO BE IN VIOLATION OF ANY LAW OR ORDINANCE.
16. ALL CONSTRUCTION SITES WITH DISTURBED AREAS OF ONE (1) ACRE OR GREATER SHALL HAVE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ALL ASSOCIATED DOCUMENTS (SEE ENGINEERING AND PERMITTING APPLICATION PACKET).

CAUTION REGARDING STORM DRAIN PIPES: CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE PIPE FROM DAMAGE DURING THE CONSTRUCTION STAGE. THE COVER ON THE DRAINAGE PIPE IS DESIGNED FOR FINAL GRADE; THEREFORE, EXTRA CARE MUST BE EXERCISED DURING THE CONSTRUCTION PHASE TO MAINTAIN COVER OVER PIPES.

NOTE REGARDING CMU AND RETAINING WALLS: THE CITY OF SURPRISE REQUIRES ALL WALLS BE APPROVED BY TEH COMMUNITY DEVELOPMENT DEPARTMENT (623-222-3000). BUILDING PERMITS AND INSPECTIONS ARE REQUIRED PER THE INTERNATIONAL BUILDING CODE.

	PALO VERDE TREE	_____ W _____	WATER
	DRYWELL	_____ SS _____	SANITARY SEWER
	WATER VALVE		
	SANITARY SEWER MANHOLE		

SAI GENERAL NOTES

- STRAND ASSOCIATES, INC. (SAI) STANDARD NOTES:
1. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO BEGINNING CONSTRUCTION.
2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING PERMITS AND RENEWAL OF LAPSED PERMITS.
3. THE CONTRACTOR IS RESPONSIBLE FOR MAKING ARRANGEMENTS FOR INSPECTION AND TESTING.
4. THE CONTRACTOR SHALL NOTIFY THE INSPECTING AGENCY(S) 24 HOURS PRIOR TO CONSTRUCTION. CONSTRUCTION CONCEALED WITHOUT THE REQUIRED INSPECTION SHALL BE SUBJECT TO EXPOSURE AT THE CONTRACTOR'S EXPENSE.
5. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CALL BLUE STAKE AT (602) 263-1100 AT LEAST 48 HOURS BEFORE ANY CONSTRUCTION BEGINS.
6. THE CONTRACTOR WILL FOLLOW GUIDELINES AND REGULATIONS SET FORTH BY O.S.H.A. SAI WILL NOT BE RESPONSIBLE FOR JOB-SITE SAFETY PROCEDURES OR CONDITIONS.
7. THE CONTRACTOR IS RESPONSIBLE FOR HIS OWN TAKEOFF QUANTITIES. QUANTITIES SHOWN HEREON ARE ESTIMATES ONLY AND AS SUCH ARE NOT TO BE USED FOR BID PURPOSES.
8. THE CONTRACTOR IS RESPONSIBLE FOR THE NOTIFICATION OF THE PROPER AUTHORITY(S) IF THERE ARE OBSTRUCTIONS TO PROPOSED IMPROVEMENTS AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY EXISTING ITEM REMOVED TO FACILITATE CONSTRUCTION SHALL BE REPLACED IN THE SAME OR BETTER CONDITION AT THE CONTRACTOR'S EXPENSE.
9. THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL ON AND AROUND THE CONSTRUCTION SITE.
10. IN THE EVENT SAI PROVIDES CONSTRUCTION STAKING, THE FOLLOWING NOTES SHALL APPLY:
- A.) THE CONTRACTOR'S AUTHORIZED REPRESENTATIVE SHALL REQUEST STAKING SERVICES TWO WORKING DAYS IN ADVANCE. RESTAKING WILL BE PROVIDED ON A TIME & MATERIALS BASIS AT THE CURRENT CREW RATES.
- B.) THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL CONSTRUCTION STAKES PRIOR TO START OF CONSTRUCTION.
- C.) THE CONTRACTOR SHALL PROTECT AND PRESERVE THE ORIGINAL SURVEY STAKES. NO CLAIM AGAINST SAI WILL BE ALLOWED WHERE SUCH STAKES ARE NOT PRESENT AND VERIFIED AS TO THEIR ORIGIN.
11. RELEASE AND USE OF THESE PLANS CONFERS UPON THE USER A DUTY OF FURTHER, CONTINUED COOPERATION AMONG THE OWNER(S), CONTRACTOR(S) AND SAI. ALL CONSTRUCTION DOCUMENTS ARE INSTRUMENTS OF SERVICE AND MAY REQUIRE FURTHER DECISIONS, JUDGEMENT AND CLARIFICATION BY SAI. ANY PROBLEMS ALLEGED WITH THESE PLANS SHOULD BE REPORTED IMMEDIATELY TO SAI SO THAT SAI CAN PARTICIPATE IN THE INVESTIGATION AND SOLUTION. WITHOUT SUCH INVOLVEMENT, SAI IS RELIEVED FROM RESPONSIBILITY FOR SUBSEQUENT DAMAGES.
12. ANY REESTABLISHMENT OF SURVEY STAKES OR MONUMENTS DESTROYED BY CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
13. STRAND ASSOCIATES, INC. AND THE REGISTRANT SEALING THESE DOCUMENTS HAVE MADE REFERENCE TO MAG STANDARD DETAILS, SPECIFICATIONS, AND SUPPLEMENTS AS REQUIRED BY THE LOCAL AGENCY. SINCE THE DEVELOPMENT OF THE REFERENCED DETAILS AND SPECIFICATIONS WAS NOT UNDER THE DIRECT SUPERVISION OF STRAND ASSOCIATES INC. OR THE REGISTRANT, WE CANNOT ASSUME ANY LIABILITY FOR THE ACCURACY OR COMPLETENESS OF THE MAG STANDARD DETAILS, SPECIFICATIONS, AND SUPPLEMENTS.
14. EVERY ATTEMPT HAS BEEN MADE TO COORDINATE THESE PLANS WITH THE OTHER DISCIPLINES AND UTILITY COMPANIES INVOLVED. HOWEVER, AS OF THE DATE THESE PLANS WERE SEALED NOT EVERY ASPECT OF THE PROJECT WAS FINALIZED. IT IS THE CONTRACTOR'S RESPONSIBILITY PRIOR TO AND THROUGHOUT CONSTRUCTION TO COORDINATE THE CIVIL ENGINEERING ASPECTS OF THE PROJECT WITH THE OWNER'S AND DESIGN TEAM'S REPRESENTATIVE TO ENSURE THAT THE DOCUMENTS HE IS USING REFLECT THE CURRENT DESIGN INTENT OF THE PROJECT.
15. INFORMATION AND DATA PROVIDED IN THESE CONTRACT DOCUMENTS REGARDING EXISTING OVERHEAD OR UNDERGROUND UTILITIES OR OTHER FACILITIES (COLLECTIVELY "UTILITIES") AT OR CONTIGUOUS TO THIS PROJECT WAS PROVIDED BY THE OWNER, OWNERS OF SUCH UTILITIES, OR THIRD PARTIES NOT AFFILIATED WITH ENGINEER. THIS INFORMATION AND DATA HAS NOT BEEN INDEPENDENTLY VERIFIED BY ENGINEER. OWNER AND ENGINEER ARE NOT RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF INFORMATION AND DATA CONCERNING UTILITIES PROVIDED IN THE CONTRACT DOCUMENTS, AND MAKE NO REPRESENTATION OR WARRANTY THAT ALL EXISTING UTILITIES ARE CORRECTLY LOCATED, IDENTIFIED OR DISCLOSED IN THESE CONTRACT DOCUMENTS. FOR MORE INFORMATION ON, OR TO CONFIRM THE LOCATION OF EXISTING UTILITIES, CONTACT THE ARIZONA BLUE STAKE CENTER AT (602) 263-1100.



DATE:	11/17/15	1/26/16					
REVISIONS	90% OWNER REVIEW	2ND CIVIL REVIEW					
NO.							

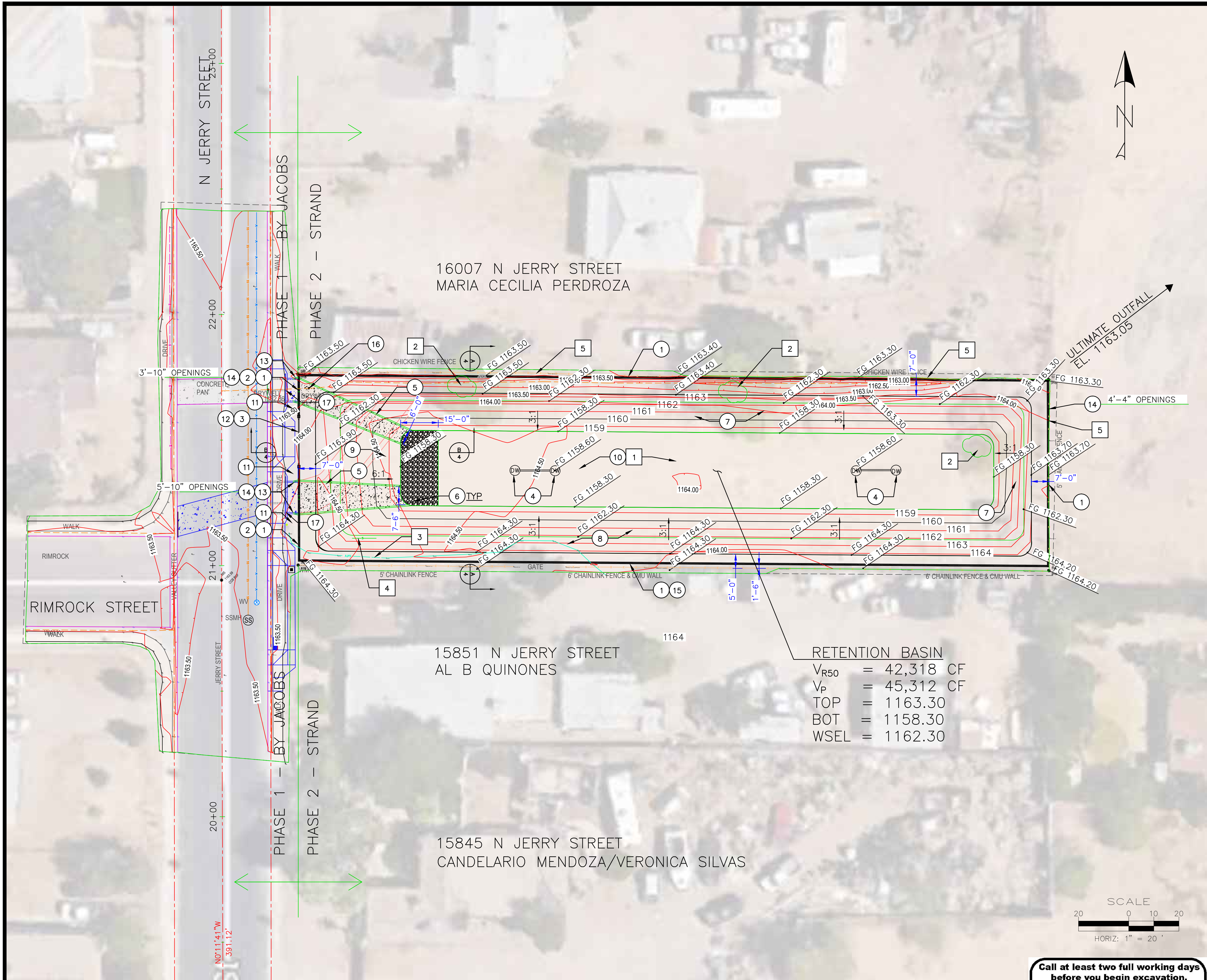
16001 N JERRY STREET DRAINAGE IMPROVEMENTS

NOTES
CITY OF SURPRISE
SURPRISE, ARIZONA

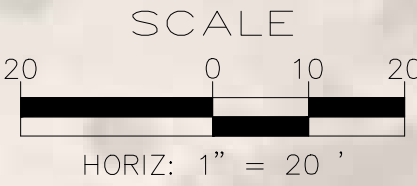
JOB NO.
3484.005
PROJECT MGR.
DANIEL RICHARDS



SHEET
2
2 OF 6



RETENTION BASIN
V_{R50} = 42,318 CF
V_p = 45,312 CF
TOP = 1163.30
BOT = 1158.30
WSEL = 1162.30



Call at least two full working days
before you begin excavation.
ARIZONA811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

CONSTRUCTION NOTES

1. INSTALL 8" SPLIT FACED MASONRY WALL AT 6' HEIGHT PER DETAIL ON PAGE 5. PAINT ALL INSIDE AND OUTSIDE SURFACES COLOR: FRAZEE CLC 1249W "ROLLING STONE" (730 LF)
2. FINAL GRADE AT WALL IMMEDIATELY ADJACENT TO JERRY STREET TO MATCH PHASE 1 SIDEWALK ELEVATIONS (NPI)
3. INSTALL 16' WIDE DOUBLE DOOR STEEL SWING GATE PER DETAIL ON PAGE 6 (1 EA)
4. INSTALL MAXWELL PLUS DRYWELL. SEE PAGE 6 FOR DETAIL. FINAL RIM ELEVATION SHALL BE 0.3' ABOVE FINISH GRADE (2 EA)
5. MATCH INTO PHASE 1 CONCRETE SPILLWAY. CONTINUE TO BOTTOM OF BASIN (800 SQ FT)
6. INSTALL 1' DEPTH OF RIP RAP - D50 8" WITH FILTER FABRIC AT BASE OF SPILLWAYS (16 CU YD)
7. 3:1 SIDE SLOPE STARTING 7' FROM PROPERTY LINES PER PLAN
8. 3:1 SIDE SLOPE STARTING 5' FROM PROPERTY LINES PER PLAN
9. 6:1 SIDE SLOPE STARTING 7' FROM PROPERTY LINES PER PLAN
10. SOIL STABILIZATION: INSTALL 3/4" SCREENED MADISON GOLD DECOMPOSED GRANITE (DG) INSIDE PERIMETER WALLS. 2" DEPTH (150 CU YD)
11. INSTALL 3/4" SCREENED MADISON GOLD DG IN BETWEEN PHASE 1 CONCRETE AND FRONT WALL FOR AESTHETICS. 2" DEPTH (1 CU YD)
12. INSTALL SIGN "CITY PROPERTY - NO TRESPASSING - VIOLATORS WILL BE PROSECUTED - ARS 13-1502,1503, 1504" (1 EA)
13. FLARE EXISTING SPILLWAY 2' AT A 4:1 TO MATCH INTO WALL OPENING WIDTH. (4 EA)
14. ADD DRAINAGE OPENINGS PER PAGE 5 WALL DETAILS (3 EA)
15. PROTECT IN PLACE EXISTING FENCE ON SOUTH SIDE OF PROPERTY (NPI)
16. CLEAN OUT EXISTING DRYWELL PER MANUFACTURERS SPECIFICATIONS. (1 EA)
17. PAINT SAFETY RAILING - COLOR: FRAZEE CLC 1249W "ROLLING STONE" (28 LF)

REMOVAL NOTES

1. SOIL REMOVAL. INCLUDES ANY UNKNOWN BURIED DEBRIS. HAUL PLAN IS CONTRACTOR'S RESPONSIBILITY (2200 CU YD)
2. REMOVE EXISTING PALO VERDE TREE (3 EA)
3. RELOCATE COX CABLE SERVICING 15851 N JERRY STREET (1 EA)
4. CUT, CAP AND REMOVE INACTIVE 4" SEWER LATERAL. EXACT LOCATION IS UNKNOWN. (1 EA)
5. REMOVE EXISTING FENCE ENCROACHING ON NORTH AND EAST SIDES OF PROPERTY. (376 LF)



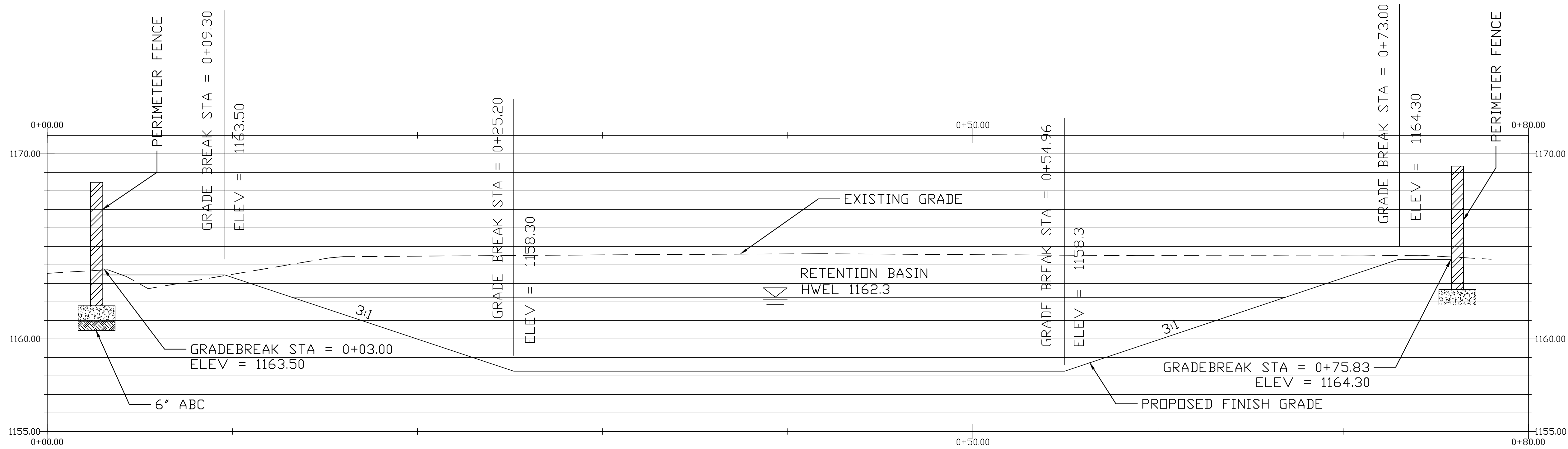
DATE:	11/17/15	1/28/16							
REVISIONS	90% OWNER REVIEW	2ND CIVIL REVIEW							
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RETENTION PLAN
CITY OF SURPRISE
SURPRISE, ARIZONA

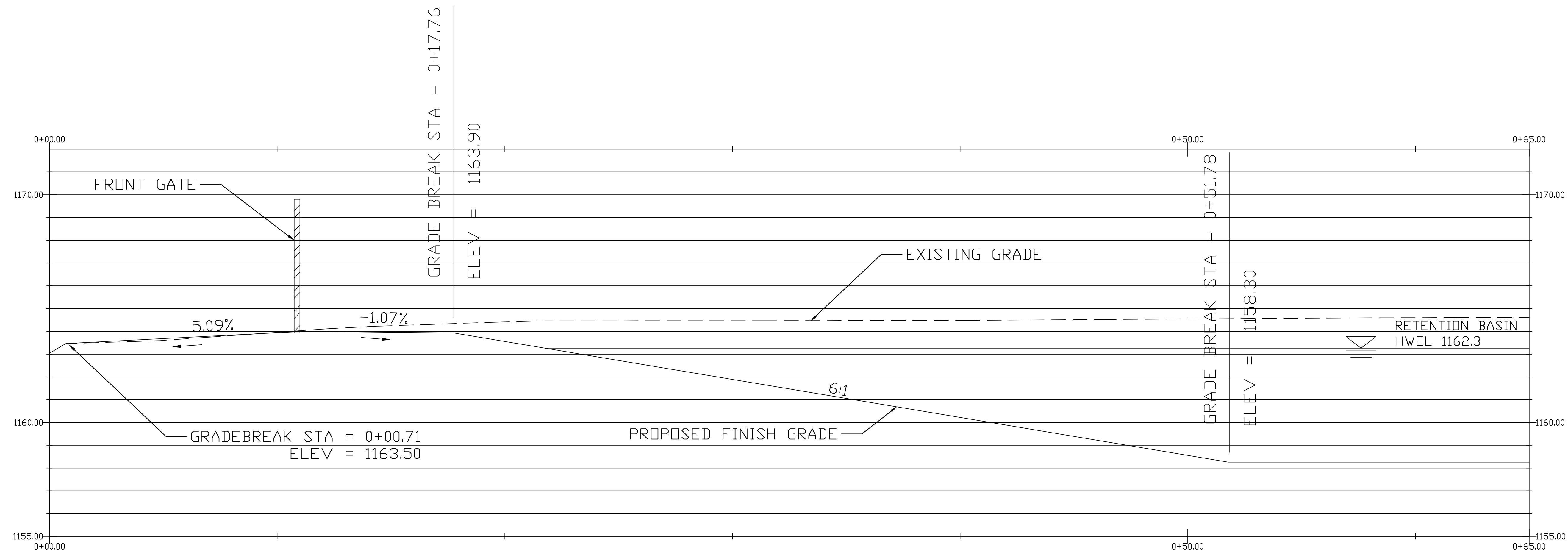
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SHEET
3
OF 6



BASIN CROSS SECTION (A)



DRIVEWAY CROSS SECTION (B)



NO.	REVISIONS	DATE
1	90% OWNER REVIEW	11/17/15
2	2ND CIVIL REVIEW	1/26/16
3		
4		
5		
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8		
9		
10		

16001 N JERRY STREET DRAINAGE IMPROVEMENTS
CROSS SECTIONS
 CITY OF SURPRISE
 SURPRISE, ARIZONA

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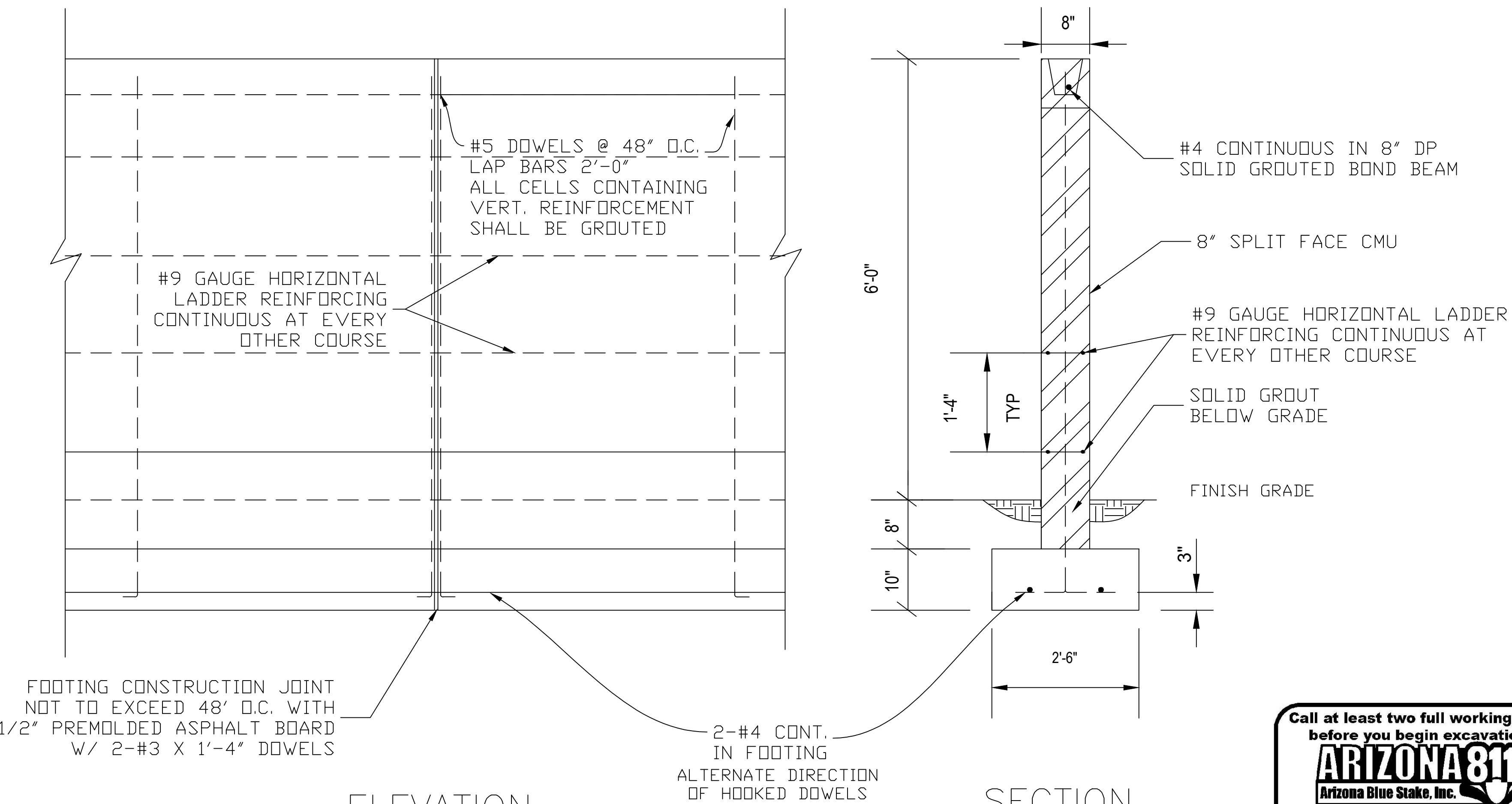


SHEET
4
4 OF 6





- 8" MASONRY WALL
PER 2009 IBC
- WIND PRESSURE: 17 psf per ASCE 7-05
- CMU: $f'_m = 1,500$ psi
- MORTAR: ASTM TYPE S
- GROUT: $f'_c = 2,500$ psi
- CONCRETE: 4,000 psi
- REINFORCING: $f'_y = 60,000$ psi



NO.	REVISIONS	DATE:
	90% OWNER REVIEW	11/17/15
	2ND CIVIL REVIEW	1/26/16

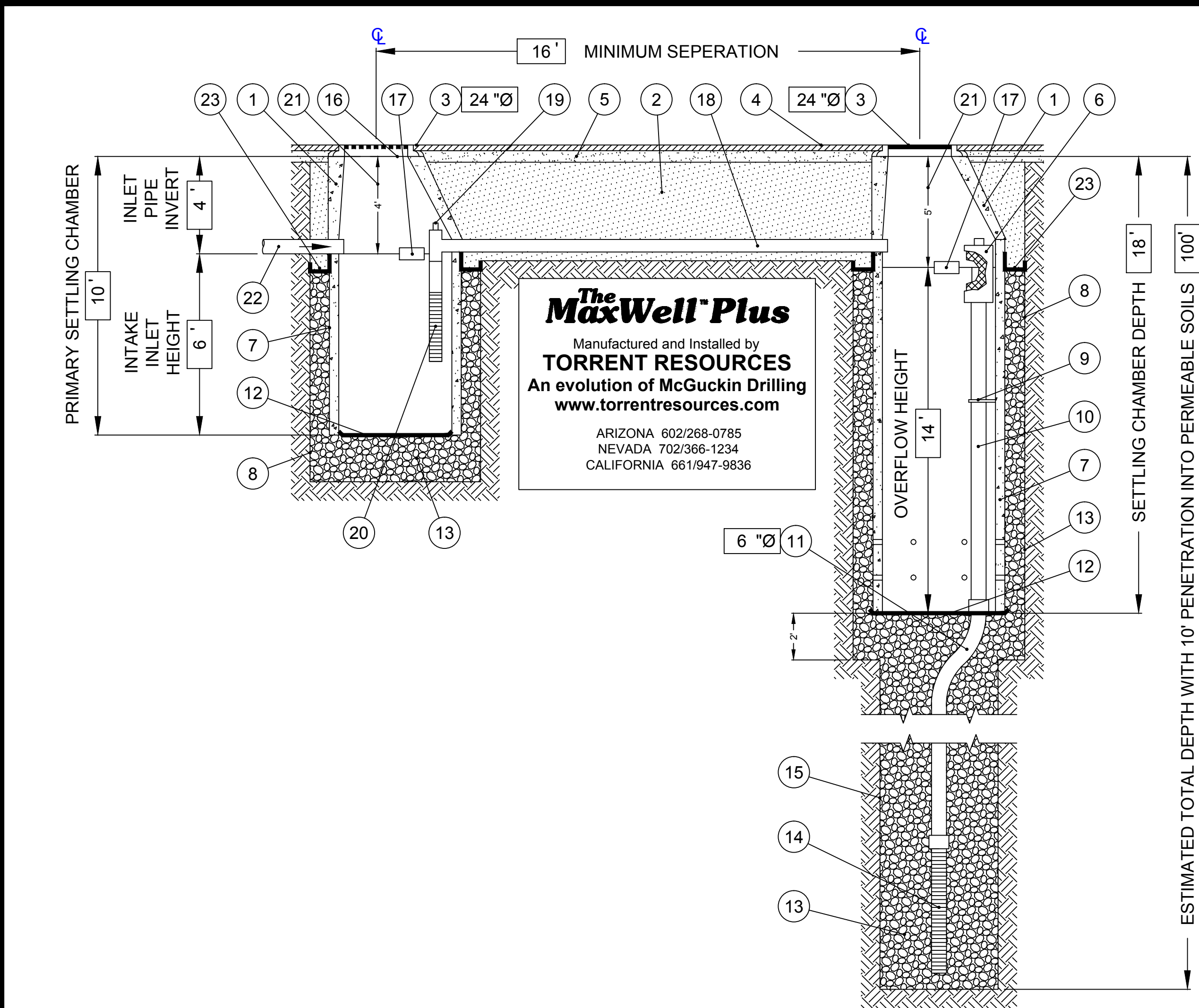
16001 N JERRY STREET DRAINAGE IMPROVEMENTS

JOB NO.
3484.005

PROJECT MGR.
DANIEL RICHARDS



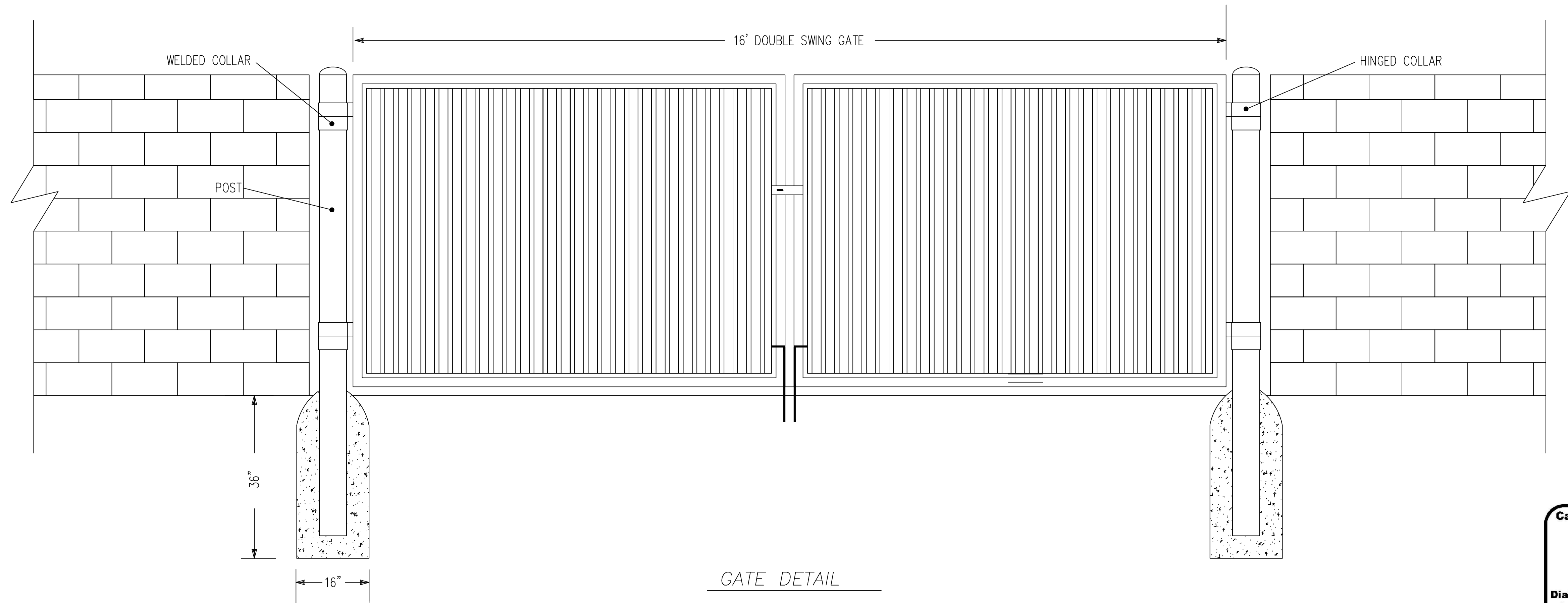
**SHEET
5
5 OF 6**



The MaxWell™ Plus Drainage System Detail And Specifications

ITEM NUMBERS

1. **MANHOLE CONE** - MODIFIED FLAT BOTTOM.
2. **STABILIZED BACKFILL** - 1 SACK SLURRY
3. **BOLTED RING & GRATE/COVER** - DIAMETER AS SHOWN. CLEAN CAST IRON WITH WORDING "STORM WATER ONLY" IN RAISED LETTERS. BOLTED IN 2 LOCATIONS AND SECURED TO CONE WITH MORTAR. RIM ELEVATION $\pm 0.02'$ OF PLANS.
4. **GRADED BASIN OR PAVING** (BY OTHERS).
5. **COMPACTED BASE MATERIAL** (BY OTHERS).
6. **PUREFLO™ DEBRIS SHIELD** - ROLLED 16 GA. STEEL X 24" LENGTH WITH VENTED ANTI-SIPHON AND INTERNAL .265" MAX. SWO FLATTENED EXPANDED STEEL SCREEN X 12" LENGTH. **FUSION BONDED EPOXY COATED.**
7. **PRE-CAST LINER** - 4000 PSI CONCRETE 48" ID. X 54" OD. **CENTER IN HOLE AND ALIGN SECTIONS TO MAXIMIZE BEARING SURFACE.**
8. **MIN. 6' Ø DRILLED SHAFT.**
9. **SUPPORT BRACKET** - FORMED 12 GA. STEEL. **FUSION BONDED EPOXY COATED.**
10. **OVERFLOW PIPE** - SCH. 40 PVC MATED TO DRAINAGE PIPE AT BASE SEAL.
11. **DRAINAGE PIPE** - ADS HIGHWAY GRADE WITH TRI-A COUPLER. **SUSPEND PIPE** DURING BACKFILL OPERATIONS TO PREVENT BUCKLING OR BREAKAGE. DIAMETER AS NOTED.
12. **BASE SEAL** - GEOTEXTILE, POLY LINER OR CONCRETE SLURRY.
13. **ROCK** - CLEAN AND WASHED, SIZED BETWEEN 3/8" AND 1-1/2" TO **BEST COMPLEMENT SOIL CONDITIONS.**
14. **FLOFAST™ DRAINAGE SCREEN** - SCH. 40 PVC 0.120" SLOTTED WELL SCREEN WITH 32 SLOTS PER ROW/FT. DIAMETER VARIES 120" OVERALL LENGTH WITH TRI-B COUPLER.
15. **MIN. 4' Ø SHAFT** - DRILLED TO **MAINTAIN PERMEABILITY** OF DRAINAGE SOILS.
16. **FABRIC SEAL** - U.V. RESISTANT GEOTEXTILE - **TO BE REMOVED BY CUSTOMER** AT PROJECT COMPLETION.
17. **ABSORBENT** - HYDROPHOBIC PETROCHEMICAL SPONGE. MIN. 128 OZ. CAPACITY.
18. **CONNECTOR PIPE** - 4" Ø SCH. 40 PVC .
19. **VENTED ANTI-SIPHON** INTAKE WITH FLOW REGULATOR.
20. **INTAKE SCREEN** - SCH. 40 PVC 0.120" MODIFIED SLOTTED WELL SCREEN WITH 32 SLOTS PER ROW/FT. 48" OVERALL LENGTH WITH TRI-C END CAP.
21. **FREEBOARD DEPTH VARIES** WITH INLET PIPE ELEVATION. INCREASE PRIMARY/SECONDARY SETTLING CHAMBER DEPTHS AS NEEDED TO MAINTAIN ALL INLET PIPE ELEVATIONS ABOVE CONNECTOR PIPE OVERFLOW.
22. **OPTIONAL INLET PIPE** (BY OTHERS).
23. **MOISTURE MEMBRANE** - 6 MIL. PLASTIC. PLACE SECURELY AGAINST ECCENTRIC CONE AND HOLE SIDEWALL. USED IN LIEU OF SLURRY IN LANDSCAPED AREAS.



GATE DETAIL



NO.	REVISIONS	DATE:	
		11/17/15	1/26/16
	90% OWNER REVIEW		
	2ND CIVIL REVIEW		

16001 N JERRY STREET DRAINAGE IMPROVEMENTS

DETAILS
DRYWELL AND GATE
CITY OF SURPRISE
SURPRISE, ARIZONA

JOB NO.

3484.005

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SHEET

6

6 OF 6

